

SEMINARIO SISTEMAS DINÁMICOS DE SANTIAGO.

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TÍTULO: *Open dynamics on subshifts of finite type.*

RESUMEN: Dynamical systems can be broadly classified into closed and open systems. In a (traditional) closed system, the orbit of a point lies in the state space for all time, whereas in an open system, the orbit of a point may eventually escape from the state space through a hole. The notion of open dynamical systems was introduced by Pianigiani and Yorke in 1979, motivated by the dynamics of a ball on a billiard table with pockets. It has attracted the attention of researchers since then especially due to its wide applications.

In this talk, we explore an irreducible subshift of finite type and examine the average rate at which orbits escape through a given hole, known as the *escape rate*. Despite having the same measure, these holes exhibit distinct intrinsic dynamical properties, which we analyze in detail. The talk is based on a joint work with N. Agarwal and S. N. Tikekar.

DÍA / HORA: Lunes 7 de abril, 2025 / 16:30 - 17:30

LUGAR: Sala 2, Facultad de Matemáticas, Pontificia Universidad Católica